

**To:** Stalcup, Dana[Stalcup.Dana@epa.gov]; Woolford, James[Woolford.James@epa.gov]; Fitz-James, Schatzi[Fitz-James.Schatzi@epa.gov]; Gartner, Lois[Gartner.Lois@epa.gov]  
**From:** Mahmud, Shahid  
**Sent:** Fri 8/14/2015 2:47:59 PM  
**Subject:** Re: Urgent Region 8 Request for Clarification on Cessation Directive

Paul did a great job at Libby but am not sure about his mine workings/hydrology type of experience. The Regions are set to go and I would rather just go with the group we have.

Shahid Mahmud  
Team Leader  
EPA Abandoned Mine Lands Team  
703-603-8789

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**From:** Stalcup, Dana  
**Sent:** Friday, August 14, 2015 10:45 AM  
**To:** Woolford, James; Fitz-James, Schatzi; Mahmud, Shahid; Gartner, Lois  
**Subject:** FW: Urgent Region 8 Request for Clarification on Cessation Directive

Do we need Paul Peronard's expertise on any of this?

Dana Stalcup

Director, Assessment and Remediation Division

OSWER/Office of Superfund Remediation and Technology Innovation (OSRTI)

Desk – 703-603-8702

Cell – 202-309-5473



**From:** Stavnes, Sandra  
**Sent:** Friday, August 14, 2015 10:26 AM  
**To:** Stalcup, Dana  
**Subject:** RE: Urgent Region 8 Request for Clarification on Cessation Directive

Dana

I never got copied on the cessation memo. Could you pass it on to me?

Also Martin offered Paul Peronard (Senior OSC) to help you guys develop criteria for decision making on this. Would that be helpful? He will be in the office today so let me know. Thanks.

Sandy

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Sandra A. Stavnes

Deputy Assistant Regional Administrator

Office of Ecosystems Protection and Remediation (8EPR)

USEPA Region 8

1595 Wynkoop Street

Denver, CO 80202

email: [stavnes.sandra@epa.gov](mailto:stavnes.sandra@epa.gov)

phone: 303-312-6117

**From:** Stalcup, Dana  
**Sent:** Friday, August 14, 2015 7:52 AM  
**To:** Stavnes, Sandra; Cheatham, Reggie; Hestmark, Martin  
**Cc:** Woolford, James; Murray, Bill; McGrath, Shaun; DalSoglio, Julie; Ostrander, David; Williams, Laura; Woodyard, Josh  
**Subject:** RE: Urgent Region 8 Request for Clarification on Cessation Directive

We will be meeting here shortly on this and get back with you very soon – thanks

Dana Stalcup

Director, Assessment and Remediation Division

OSWER/Office of Superfund Remediation and Technology Innovation (OSRTI)

Desk – 703-603-8702

Cell – 202-309-5473



**From:** Stavnes, Sandra

**Sent:** Friday, August 14, 2015 9:28 AM

**To:** Cheatham, Reggie; Hestmark, Martin

**Cc:** Woolford, James; Murray, Bill; Stalcup, Dana; McGrath, Shaun; DalSoglio, Julie; Ostrander, David; Williams, Laura; Woodyard, Josh

**Subject:** RE: Urgent Region 8 Request for Clarification on Cessation Directive

Reggie

Do you need anything more from us besides the Gold King action memo to give us a decision on going forward with work on the Red and Bonita?

Sandy

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Sandra A. Stavnes

Deputy Assistant Regional Administrator

Office of Ecosystems Protection and Remediation (8EPR)

USEPA Region 8

1595 Wynkoop Street

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email: [stavnes.sandra@epa.gov](mailto:stavnes.sandra@epa.gov)

phone: 303-312-6117

**From:** Cheatham, Reggie

**Sent:** Thursday, August 13, 2015 7:34 PM

**To:** Hestmark, Martin

**Cc:** Woolford, James; Murray, Bill; Stalcup, Dana; McGrath, Shaun; DalSoglio, Julie; Stavnes, Sandra; Ostrander, David; Williams, Laura; Woodyard, Josh

**Subject:** RE: Urgent Region 8 Request for Clarification on Cessation Directive

Ok got it Thanks

Reggie Cheatham, Director

Office of Emergency Management

202-564-8003(w) 202-689-9400(c)

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**From:** [Hestmark, Martin](#)

**Sent:** 8/13/2015 9:29 PM

**To:** [Cheatham, Reggie](#)

**Cc:** [Woolford, James](#); [Murray, Bill](#); [Stalcup, Dana](#); [McGrath, Shaun](#); [DalSoglio, Julie](#); [Stavnes, Sandra](#); [Ostrander, David](#); [Williams, Laura](#)

**Subject:** Re: Urgent Region 8 Request for Clarification on Cessation Directive

I was not referring to that I was looking for you to get the documentation you need to approve our continued work on the Red and Bonita and the Gold King

Sent from my iPhone

On Aug 13, 2015, at 7:10 PM, Cheatham, Reggie <[cheatham.reggie@epa.gov](mailto:cheatham.reggie@epa.gov)> wrote:

Martin we began discussing what we may need in the form of an action memo if that is what you are referring to. Will know something shortly

Reggie Cheatham, Director  
Office of Emergency Management  
202-564-8003(w) 202-689-9400(c)

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**From:** Hestmark, Martin  
**Sent:** 8/13/2015 8:58 PM  
**To:** Woolford, James  
**Cc:** Murray, Bill; Stalcup, Dana; Cheatham, Reggie; McGrath, Shaun; DalSoglio, Julie; Stavnes, Sandra; Ostrander, David; Williams, Laura  
**Subject:** Re: Urgent Region 8 Request for Clarification on Cessation Directive

Do we have something in front of Reggie and k for gold king and red and Bonita?

Sent from my iPhone

On Aug 13, 2015, at 6:25 PM, Woolford, James <[Woolford.James@epa.gov](mailto:Woolford.James@epa.gov)> wrote:

Bill, et. al.

Thanks for inquiring about this site.

I have coordinated with the OSWER IO - Mathy, Barry, and Nitin.

Based on the description in your email, and as you recommend in your email, we approve your continuing your response work at Bullion Mine.

Jim Woolford, Director

Office of Superfund Remediation and Technology Innovation

Office of Solid Waste and Emergency Response

US EPA

Phone: 703-603-8960 (office)

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Address

2777 S. Crystal Drive

Arlington, VA 22202

Room 5622

Note - EPA email cannot receive or send emails greater than 25 mbs.

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**From:** Murray, Bill

**Sent:** Thursday, August 13, 2015 7:14 PM

**To:** Woolford, James; Stalcup, Dana; Cheatham, Reggie

**Cc:** McGrath, Shaun; Hestmark, Martin; DalSoglio, Julie; Stavnes, Sandra; Ostrander, David; Williams, Laura

**Subject:** Urgent Region 8 Request for Clarification on Cessation Directive

Subject: Clarification on the Exclusion from the Cessation Directive for Time Critical

## Removal Actions in general and specifically at Basin Mining NPL Site

**Clarification Request: Based on the draft language in the Woolford/Cheatam memo, we want to know if Time Critical Removal Actions are/will be excluded from the cessation directive. We have a number of Time Critical Removal Actions underway at mining sites and this clarification is urgently needed. We would like a written confirmation that we can continue these removals.**

## BACKGROUND on Bullion Mine at the Basin Mining NPL Site

Removal activities to be completed for OU6 are:

- Installation of a relief well near the Bullion Mine adit intercept boring to prevent a blowout, and to pump the AMD water for treatment in 2015. Local drilling subcontractors to be determined and procured by ER (FY14).
- Removal of site non-historical cabin structures. Clearing and grading area in designated retention pond location, and construction of retention ponds (FY14).
- Treatment of approximately 2.5 million gallons of trapped mine water, and discharging treated water to Jill Creek (FY15).
- Removal of debris creating blockage in adit and installation of a drainage system to allow the AMD flowing freely from the mine adit onto the existing rock-lined channel (FY15).
- Ongoing road maintenance for site accessibility and safety (FY14, FY15).
- Disposal of contaminated sludge and debris at Luttrell Repository

The OSC has placed a berm along the road to contain and direct any adit flow to the treatment/retention pond. He also will have an excavator on site today just in case. We have pumped the volume of water down in the adit behind the debris plug, those materials may have dried out and shifted position somewhat. **If we now stop pumping and treating, the mine would refill and put pressure back on the destabilized plug, which could result in a blowout.** The safest path forward is to continue to pump and treat and fully dewater the mine. The State is fully supportive of our continued dewatering effort.

The distance from the collapsed portal to the well that we are pumping water out of is about 300 feet. If the adit diameter is 4' (most likely scenario), the volume in the adit below the well is 28,201 gallons. If the diameter is 6', the volume is 63,451 gallons. To be extremely conservative, if the diameter is 10', the volume is 176,255 gallons. Our treatment pond below the adit portal holds 350,000 gallons, so even with an ongoing flow rate of AMD from the mine of 10 to 20 gallons/minute, this pond is large enough to contain the mine sludges left in the tunnel between the well and the portal.

It is clear that ongoing pump and treatment of the AMD mine pool in the Bullion adit is the safest path forward as it is relieving pressure on the debris plug, and it would be counter-productive to stop our pumping and treating of mine water now. We believe, based on water elevation measurements in the well standpipe, that we've removed over half the volume of water that was in the adit. The total volume we estimated in the adit was approximately 2.5 million gallons prior to beginning the pumping and treating operation. The OSC is excavating a channel over to the treatment/retention pond today in the unlikely event that the debris plug fails before we complete the pump and treat operations. We have the equipment and materials on site to capture and treat any unexpected breach of the debris plugged adit. I can provide additional pictures and would be happy to go up to the site with you this afternoon if need be.